TWO NEW SPECIES OF THE ANT GENUS *DOLICHODERUS* LUND (HYMENOPTERA: FORMICIDAE) FROM GUANGXI, CHINA

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Abstract Two new species of the ant genus *Dolichoderus* Lund from Guangxi Province are described. They are *D. flatidorsus* sp. nov. and *D. pilosus* sp. nov.

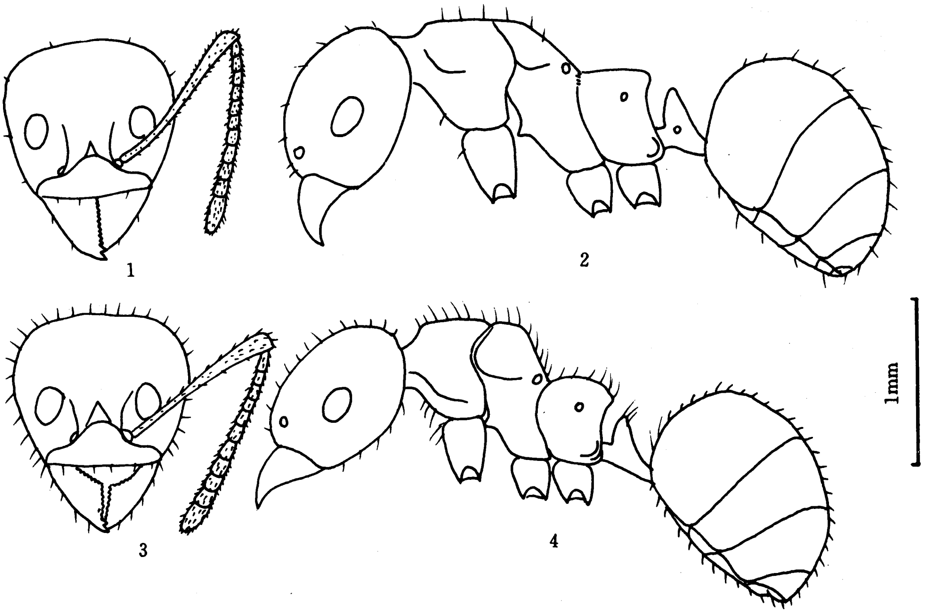
Key words Hymenoptera, Formicidae, *Dolichoderus*, new species

The ant genus *Dolichoderus* Lund is the largest genus in the subfamily Dolichoderinae and has a complex taxonomic history. It has been treated as a single genus (Forel 1878, wheeler and Wheeler 1985), and as many as seven genera (Brown 1950). Modern myrmecologists have generally recognized it as two to three genera: *Dolichoderus*, *Hypoclinea* and *Monoceratoclinea* (Brown 1973, Snelling 1981, Holldobler and Wilson 1990). In 1992, Shattuck revised the subfamily and considered that it is convenient to recognize this taxon as a genus. In treating the genus in this way, there will be no group left to be paraphyletic such as the *Hypoclinea*. Up till now, 110 species belonging to this genus have been described in the world. They distribute mainly over the Neotropical region and only 9 species over the Oriental region (Bolton 1995). When the authors study the ants of Guangxi Province, two new species are discovered. Descriptions of them are as below. The holotype specimen is deposited in the Insitute of Zoology, Shaanxi Normal University and the paratype specimens are deposited in the Department of Biology, Guangxi Normal University. The measurements and indices used in this paper are as defined by Bolton in 1983.

1 *Dolichoderus flatidorsus* sp. nov. (Figs. 1-2)

Holotype worker: TL 3.65 mm, HL 0.90 mm, HW 0.83 mm, CI 98, SL 0.90 mm, SI 102, PW 0.46 mm, AL 1.10 mm, ED 0.22 mm.

Head with mandibles subtriangular, broader posteriorly than in front, sides slightly convex, posterior margin nearly straight, lateral corner rounded. Clypeus broadly triangular, slightly convex behind, flat in front, transverse anteriorly, rounded posteriorly.



Figs. 1-4 *Dilichoderus* workers.
1-2. *D. flatidorsus* sp. nov.; **3-4.** *D. pilosus* sp. nov.;
1,3. head in frontal view; **2,4.** body in profile.

Head, clypeus, antennae, eyes, frontal carinae and mandibles resemble those of *D. flatidorsus*, but mandibles with a row of denticles on their posterior margin. Frontal area broad but with indistinct border. Pronotum flat above; pro-mesonotal suture broad and deep, separate mesonotum from pronotum; posterior portion of mesonotum oblique, much steeper than that of *D. flatidorsus*; meso-propodeal emargination deep and well-marked; propodeum with its basal portion and declivity subequal in length, the former convex, not horizontal, the latter slightly concave. Petiolar node, gaster and legs as those of *D. flatidorsus*.

Head with reticulations coarser and denser than those of *D. flatidorsus*. Punctures and rugae coarse but irregular on thorax which appears much rougher than that of *D. flatidorsus*; punctures on gaster as *D. flatidorsus*.

Erect hairs on body longer and denser than those of *D. flatidorsus*, the longest hair on pronotum is 0.18 mm; hairs on gaster shorter and blunt. Pubescence abundant, but slightly thinner than that of *D. flatidorsus*.

Head, thorax and fore coxae brownish red, gaster black; clypeus, mandibles, funiculi of antennae and legs (except fore coxae) paler.

Paratypes 7 workers: TL 3.14-3.60 mm, HL 0.86-0.94 mm, HW 0.83-0.91 mm, CI 96-98, SL 0.77-0.81 mm, SI 89-92, PW 0.47-0.54 mm, AL 0.94-

Mandibles triangular, with 10 to 12 teeth on their masticatory margin, the apical and subapical teeth larger. The frontal area small but distinct, elongate triangular; frontal carinae short, widely apart, slightly diverging posteriorly. Antennae long, thickened toward apex, scape extending beyond the posterior margin of head. Pronotum flat above, margined anteriorly and on the sides; mesonotum flat in front, as high as pronotum, oblique behind; pro-mesonotal suture distinct, meso-propodeal suture emarginate deeply. Propodeum with its basal portion and declivity subequal in length, the former horizontal, the later truncate and slightly concave. Petiolar node low, slightly convex in front, straight behind, incline forward, upper border transverse. Gaster broadly oval, very convex above, anterior surface concave. Legs rather long.

Head moderately reticulated. Thorax coarsely punctured except mesopleurae which have sparse longitudinal rugae, interface of rugae smooth. Gaster moderately punctured.

Hairs pale, abundant, erect and soft on whole body. Pubescence dense, nearly covering punctures on head and on gaster, sparse on sides of thorax.

Head and gaster black; thorax reddish brown; mandibles, clypeus, antennae and fore coxae yellowish brown; all legs yellow except fore coxae.

Paratypes 26 workers: TL 3.40-4.06 mm, HL 0.90-1.09 mm, HW 0.88-1.13 mm, CI 95-102, SL 0.86-1.05 mm, SI 92-102, PW 0.46-0.62 mm, AL 1.04-1.36 mm, ED 0.21-0.26 mm.

Other variations: About 30 percent of the specimens with a small tooth on the upper border of the petiolar node, the longest tooth 0.07 mm, like a spine; one specimen with its mesonotum slightly higher than pronotum, head more larger than that of any others, CI 102, ED 0.26 mm, declivity of propodeum very concave.

Holotype worker, Huaping Natural Conservation (1 856 m), Guangxi Jul. 6, 1995, collected by Shanyi Zhou. Paratypes: 13 workers, data as holotype; 13 workers, Jinxiu County, Guangxi, Sep. 23, 1995, collected by Shanyi Zhou.

This new species is similar to *D. taprobanae* Smith but differs from the latter in: 1) head reticulated and not shining as in the latter; 2) hairs and pubescence abundant, pubescence nearly covering punctures on head and on gaster, while in the latter the hairs and pubescence are scattered and thin; and 3) head black, while the latter's is brownish red.

2 ***Dolichoderus pilosus*** **sp. nov.** (Figs. 3-4)

Holotype worker: TL 3.52 mm, HL 0.89 mm, HW 0.86 mm, CI 96, SL 0.81 mm, SI 92, PW 0.52 mm, AL 1.00 mm, ED 0.21 mm.

1.07 mm, ED 0.21-0.22 mm.

Other variations: Body color variable, 3 specimens with their fore coxae, mesopleurae and propodeum blackish red; one specimen with its mesonotum slightly higher than pronotum.

Holotype worker, Bobai County, Guangxi, Aug. 17, 1995, collected by Changhong Wang. Paratypes 7 workers, data as holotype.

This new species also resembles *D. taprobanae* Smith but differs from the latter in: 1) head coarsely and densely reticulated, not shining; 2) erect hairs and pubescence abundant; and 3) pro-mesonotal sututre broad and deep, basal portion of propodeum convex, not horizontal.

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广西臭蚁属二新种 （膜翅目：蚁科）

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本文描述发现于广西的臭蚁属2新种。新种平背臭蚁 *Dolichoderus flatidorsus* sp. nov. 与黑腹臭蚁 *D. taprobanae* 相似，主要区别为：1)头部具网状刻点，不光亮；2)立毛及柔毛被丰富，头部和后腹部的柔毛几遮盖刻点，而后者毛被稀而薄；3)头部黑色，而后者头部褐红色。新种毛臭蚁 *D. pilosis* sp. nov. 也与黑腹臭蚁相似，主要区别是：1)头部具粗密网状刻点，不光亮；2)立毛及柔毛被密集；3)前一中胸背板缝宽而深，并胸腹节基面隆起，不平直。